

WHAT IS CLAIMED IS:

- 5 1. A yarn formed at least in part from a filament
having a cross-sectional bilobal S-shape or Z-shape,
wherein the cross-section for the S- and Z-shaped
filament comprises a substantially flat sided
rectangular-shaped central segment having two opposite
10 ends with a substantially flat sided arm having a
curved tip portion extending from each opposite end of
the central segment, wherein the width of the central
segment and each arm is substantially the same, and the
length of the central segment and each arm is
15 substantially the same, wherein the angle formed
between the arms and the central segment ranges from
about 105° to about 165°, and wherein the bilobal
filaments of the yarn have a denier per filament
between about 0.1 to about 4.0.
- 20 2. The yarn of claim 1, wherein said yarn comprises
at least about 50% of the Z-shaped or S-shaped cross-
sectional filaments, based on the total number of
filaments.
- 25 3. The yarn of claim 2, wherein said yarn comprises
at least about 90% of the Z-shaped or S-shaped cross-
sectional filaments.
- 30 4. The yarn of claim 1, having a denier of between
about 15 and 200 denier.
5. The yarn of claim 1, wherein the filaments are
individually formed from a homopolymer, copolymer,
35 terpolymer, or combinations thereof of a polymer
selected from the group consisting of polyamides,
polyolefins, polyesters, and combinations thereof.

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6. The yarn of claim 1, wherein the filaments are individually formed from a polyamide selected from the group consisting of nylon 6, nylon 6,6, nylon 6,12, and combinations thereof.

7. The yarn of claim 5, wherein the polyamide is nylon 6,6.

8. A filament having a cross-sectional bilobal S-shape or Z-shape, wherein the cross-section for each filament comprises a substantially flat sided rectangular-shaped central segment having two opposite ends with a substantially flat sided arm having a curved tip portion extending from each opposite end of the central segment, wherein the width of the central segment and each arm is substantially the same, and the length of the central segment and each arm is substantially the same, wherein the angle formed between the arms and the central segment ranges from about 105° to about 165°, and wherein the denier per filament is between about 0.1 to about 4.0.

9. A yarn formed at least in part from a filament having a cross-sectional bilobal S-shape or Z-shape, wherein the cross-section for each biolabal filament comprises a substantially flat sided rectangular-shaped central segment having two opposite ends with a substantially flat sided arm having a curved tip portion extending from each opposite end of the central segment, wherein the width of the central segment and each arm is substantially the same, and the length of the central segment and each arm is substantially the same, wherein the angle formed between the arms and the central segment ranges from about 105° to about 165°, and wherein the yarn comprises at least about 70% of the Z-shaped or S-shaped cross-sectional filaments, based on the number of total filaments.

10. A fabric formed at least in part from a multifilament yarn of claim 1.

5 11. A fabric formed at least in part from a multifilament yarn of claim 9.

12. A fabric formed at least in part from a filament of claim 8.

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13. A double sided fabric comprising on one side a multifilament yarn formed at least in part from one or more filaments having a cross-sectional bilobal S-shapes or Z-shapes, wherein the cross-section for each bilobal filament comprises a substantially flat sided rectangular-shaped central segment having two opposite ends with a substantially flat sided arm having a curved tip portion extending from each opposite end of the central segment, wherein the width of the central segment and each arm is substantially the same, and the length of the central segment and each arm is substantially the same, wherein the angle formed between the arms and the central segment ranges from about 105° to about 165°, and on the other side another yarn.

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14. The fabric of claim 13, wherein the filaments have a denier per filament of between about 0.1 to about 4.0.

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15. The fabric of claim 13, wherein a wetting agent is applied to the side comprising filaments having S- or Z-shaped cross-sections.

35 16. The fabric of claim 15, wherein said wetting agent is selected from the group consisting of a hydrophilic polyamide, hydrophilic silicone, and hydrophilic polyester.

17. The fabric of claim 14, wherein the other side of the fabric comprise a polyester, polyamide, polyolefin, or natural fiber.

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18. The fabric of claim 10, comprising a wetting agent on at least one surface thereof, selected from the group consisting of a hydrophilic polyamide, hydrophilic silicone, and hydrophilic polyester.

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19. The fabric of claim 12, comprising a wetting agent on at least one surface thereof, selected from the group consisting of a hydrophilic polyamide, hydrophilic silicone, and hydrophilic polyester.

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20. A solution of a poly(hexamethylene adipamide)-poly[poly(oxyethylene) adipamide] copolymer in water and 1,2-propanediol.

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21. A method of increasing the wicking ability of an article, comprising forming the article from at least one filament as claimed in claim 8, wherein the filament is optionally treated with a hydrophilic wicking agent.

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